BRUHAT BANGALORE MAHANAGARA PALIKE

MEASUREMENT SHEET

FIRST AND FINAL BILL

Name of work: Improvements to Roads and Drains at Doddabommasandra and Surrounding area in Ward No. 10 (Doddabommasandra).

Estimated Cost : Rs. 40.00 Lakhs

Job Code: 010-20-000070

Head of Account : P-3296 14th Finance Grant

Name of Agency: Sri K.V Subba Reddy, # 106/B, Aswathanagara, RMV 2nd Stage, Bangalore - 94.

Work order No: BBMP/EE/BTP/WO/105/2020-21 Dated: 11-09-2020.

Sl No	Description of work	Unit	Mesurement No.	L	B1	B2	Av.,B	D	Qty	Rate	Amount
	Date of Recording:										
1	**Earthwork excavation by manual means for roads,** drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications										
	Qty as per Premeasurement Recorded vide E-Bill Page No. 01 to 02 is =								**510.15**	**179.57**	**91608.00**
	Smitha N L AE/D10										
2	Providing granite 10 cms thick slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete										
	Seethamma Layout	Sqm									
			1	8.00			0.90		7.20		
			1	10.00			0.90		9.00		
			1	12.00			0.90		10.80		
			1	12.00			0.90		10.80		
			1	10.00			0.90		9.00		
			1	10.00			0.90		9.00		
									55.80		
									55.76	836.21	**46627.00**

Smitha N L AE/D10
Assistant Engineer
Ward No. 10

Assistant Executive Engineer
Vidyaranyapura Sub Division

Sl No	Description of work	Unit	Mesurement No.	L	B1	B2	Av.,B	D	Qty	Rate	Amount
	Date of Recording:										
3	Providing and laying in position plain cement concrete of Mix 1:3:6 with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications.										
	Qty as per Premeasurement Recorded vide E-Bill Page No. 03 is =								**65.09**	**4762.38**	**309983.00**
	Smitha N L AE/D10										

Sl No	Description of work	Unit	Mesurement No.	L	B1	B2	Av.,B	D	Qty	Rate	Amount
4	Providing laying plain/ reinforced cement concrete for side Drains Using M20 nominal mix Concrete with OPC at 300kgs.With 20mm and Down size granite metal coarse aggregate at 0.69cum and fine aggregate at 0.43cum Machne mixed, well compacted for wall and Bottom including centering shuttering,cost of materials,HOM of Machinery,Curing Etc.,Complete Excluding cost of Steel as per morth MORTH specification No. 1500, 1700, 2200. Including Cost of material, Labour, HOM complete as per Specification-WALL & Bottom thickness 15Cm										
	Bottom Raft	Cum									
	1st Cross Seetamma Layout E/S		1	30.00			0.90	0.15	4.05		
			1	30.00			0.90	0.15	4.05		
			1	30.00			0.90	0.15	4.05		
			1	30.00			0.90	0.15	4.05		
			1	30.00			0.90	0.15	4.05		
			1	30.00			0.90	0.15	4.05		
			1	30.00			0.90	0.15	4.05		
			1	10.50			0.90	0.15	1.42		
	1st Cross Seetamma Layout W/S		1	30.00			1.20	0.15	5.40		
			1	6.00			1.20	0.15	1.08		
	Venugopal Swammy Temple		1	14.00			1.20	0.15	2.52		
	For Culvert										
	1st A Cross Seethamma Layoyt		1	3.60			1.80	0.20	1.30		
	1st B Cross Seethamma Layoyt		1	4.80			1.80	0.20	1.73		
	1st C Cross Seethamma Layoyt		1	5.40			1.80	0.20	1.94		
	Near KK Layout		1	6.80			1.80	0.20	2.45		
	Venkatagiriyappa Layout 5th Cross		1	5.30			1.80	0.20	1.91		
	Venkatagiriyappa Layout 4th Cross near Muneshwara Temple		1	5.00			1.80	0.20	1.80		
	2nd Cross Venkatagiriyappa Layout		1	3.20			1.80	0.20	1.15		
	Walls										
	1st Cross Seetamma Layout E/S		2	30.00			0.15	0.75	6.75		
			2	30.00			0.15	0.75	6.75		
			2	30.00			0.15	0.75	6.75		
			2	30.00			0.15	0.75	6.75		
			2	30.00			0.15	0.75	6.75		
			2	30.00			0.15	0.75	6.75		
			2	30.00			0.15	0.75	6.75		
			2	10.50			0.15	0.75	2.36		
	1st Cross Seetamma Layout W/S		2	30.00			0.15	1.20	10.80		
			2	6.00			0.15	1.20	2.16		
	Venugopal Swammy Temple		2	14.00			0.15	1.20	5.04		
	For Culvert										
	1st A Cross Seethamma Layoyt		2	3.60			0.20	0.75	1.08		
	1st B Cross Seethamma Layoyt		2	4.80			0.20	0.75	1.44		

Executive Engineer

Assistant Executive Engineer
Vijayanagara Sub Division
BBMP, Bangalore-97

121.12

Sl No	Description of work	Unit	Mesurement No.	L	B1	B2	Av.,B	D	Qty	Rate	Amount
	1st C Cross Seethamma Layoyt		2	5.40			0.20	0.75	1.62	121.18	
	Near KK Layout		2	6.80			0.20	0.75	2.04		
	Venkatagiriyappa Layout 5th Cross		2	5.30			0.20	0.75	1.59		
	Venkatagiriyappa Layout 4th Cross near Muneshwara Temple		2	5.00			0.20	0.75	1.50		
	2nd Cross Venkatagiriyappa Layout		2	3.20			0.20	0.75	0.96		
									128.89		
	Total								**128.64**	**6115.72**	**786726.00**

Executive Engineer

Assistant Engineer
Ward No. 10

Assistant Executive Engineer
Vidyaranyapura Sub Division

	Date of Recording:										
5	Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.										
	Qty as per Premeasurement Recorded vide E-Bill Page No. 04 is =								**10.10**	**62562.84**	**631885.00**
6	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting, including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, copmplete. (Data Rate)										
	Drain cover slab	Cum									
	1st Cross Seetamma Layout E/S		1	30.00			0.90		27.00		
			1	30.00			0.90		27.00		
			1	30.00			0.90		27.00		
			1	30.00			0.90		27.00		
			1	30.00			0.90		27.00		
			1	30.00			0.90		27.00		
			1	30.00			0.90		27.00		
			1	10.50			0.90		9.45		
	1st Cross Seetamma Layout W/S		1	30.00			1.20		36.00		
			1	6.00			1.20		7.20		
	Venugopal Swammy Temple		1	14.00			1.20		16.80		
									258.45		
	Total								**258.00**	**2021.50**	**521547.00**

Assistant Engineer
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Vidyaranyapura Sub Division

	Date of Recording:	

Sl No	Description of work	Unit	Mesurement No.	L	B1	B2	Av.,B	D	Qty	Rate	Amount
7	Providing and laying in position **plain cement concrete of Mix 1:2:4** with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications.										
	For Drain Side Filling	Cum									
	1st Cross Seetamma Layout E/S		1	30.00			0.15	0.15	0.68		
			1	30.00			0.15	0.15	0.68		
			1	30.00			0.15	0.15	0.68		
			1	30.00			0.15	0.15	0.68		
			1	30.00			0.15	0.15	0.68		
			1	30.00			0.15	0.15	0.68		
			1	30.00			0.15	0.15	0.68		
			1	10.50			0.15	0.15	0.24		
	1st Cross Seetamma Layout W/S		1	30.00			0.15	0.15	0.68		
			1	6.00			0.15	0.15	0.14		
	Venugopal Swammy Temple		1	14.00			0.15	0.15	0.32		
									6.09		
	Total								**6.08**	**4971.43**	**30226.00**

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	Date of Recording:										
8	Providing and Fixing pre cast **covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, complete as per Engineer incharge										
	Culvert cover Slab	Cum									
	1st A Cross Seethamma Layoyt		1	3.60			1.80		6.48		
	1st B Cross Seethamma Layoyt		1	4.80			1.80		8.64		
	1st C Cross Seethamma Layoyt		1	5.40			1.80		9.72		
	Near KK Layout		1	6.80			1.80		12.24		
	Venkatagiriyappa Layout 5th Cross		1	5.30			1.80		9.54		
	Venkatagiriyappa Layout 4th Cross near Muneshwara Temple		1	5.00			1.80		9.00		
	2nd Cross Venkatagiriyappa Layout		1	3.20			1.80		5.76		
									61.38		
	Total								**61.20**	**4686.57**	**286818.00**

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Vidyaranyapura Sub Division

Sl No	Description of work	Unit	Mesurement No.	L	B1	B2	Av.,B	D	Qty	Rate	Amount
	Date of Recording:										
9	**Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead										
	Qty as per Premeasurement Recorded vide E-Bill Page No. 05 is =								**38.61**	**48.66**	**1879.00**
10	Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of modified proctors density.										
	Qty as per Premeasurement Recorded vide E-Bill Page No. 06 is =								**90.09**	**297.99**	**26846.00**
11	Providing and laying in position plain cement concrete of Mix 1:4:8 with OPC @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per specifications.										
	Qty as per Premeasurement Recorded vide E-Bill Page No. 07 is =								**38.61**	**4678.02**	**180618.00**
12	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, using a grade concrete M30 over a prepared base with OPC coarse aggregate @ 0.69cum fine aggregate @ 0.46cum,coarse and fine aggregate confirming to IS:383-2016,with superplastisiser @3lts confirming to IS9103-2008mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine,and curing including cost of all materials,labour,hire chargedof machines,all lead and lift charges etc., complete as per specifications. - do with OPC at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum										
	Near KK Layout		1	16.50	5.60	5.70	5.65	0.15	13.98		
			1	23.50	5.10	5.20	5.15	0.15	18.15		
			1	8.00	5.60	5.50	5.55	0.15	6.66		
									38.80		
	Total								**38.61**	**4507.48**	**174034.00**
										Grand Total	**3088797.00**
										GST Charges (12% of estimated cost)	**370656.00**
										Total Amount	**3459453.00**

Executive Engineer

Assistant Engineer
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Vidyaranyapura Sub Division

Assistant Executive Engineer
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BBMP, Bangalore - 97